

Date: Mon, 15 Nov 93 04:30:34 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V93 #103
To: Ham-Homebrew

Ham-Homebrew Digest Mon, 15 Nov 93 Volume 93 : Issue 103

Today's Topics:

Electronic Keyer Kit
remote switch
single sideband
What's RG-22?

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 12 Nov 1993 22:46:33 GMT
From: news.service.uci.edu!paris.ics.uci.edu!csulb.edu!library.ucla.edu!
europa.eng.gtefsd.com!gatech!swrinde!dptspd!TAMUTS.TAMU.EDU!eemips.tamu.edu!
sanjesh@network.ucsd.edu
Subject: Electronic Keyer Kit
To: ham-homebrew@ucsd.edu

there is a keyer construction based on microprocessor,
which is very flexible and user friendly.
pl look into ARRL handbook.

-mallik
mallik@aisg.com

Date: Wed, 10 Nov 1993 23:42:31 GMT
From: amd!amdcl2!brian@decwrl.dec.com
Subject: remote switch

To: ham-homebrew@ucsd.edu

Steve Bass writes:

```
> As part of a project of mine, I would like to construct a remote
> control switch that operates on principles used by garage door
> openers and car alarm systems.
>
> Steve Bass
> sbass@fc.hp.com
```

I just finished playing around with one of these and wanted to post what I'd learned to the net but wasn't sure whether anyone would be interested. Obviously, someone is, so here's the garage door info file:

I recently reverse-engineered the transmitter half of a simple garage door opener. My intent was to increase it's range beyond the current 30 foot maximum. I didn't figure out how to crank the power, but I did learn a lot about how they work. I haven't studied the receiver box yet.

Clock:

The circuit derives a simple 50% duty cycle clock from an RC based oscillator. Most of this logic is contained in the single IC. There are two external resistors and one external capacitor used to set the clock frequency. (Note that this clock is a digital clock and has nothing to do with producing the actual RF.)

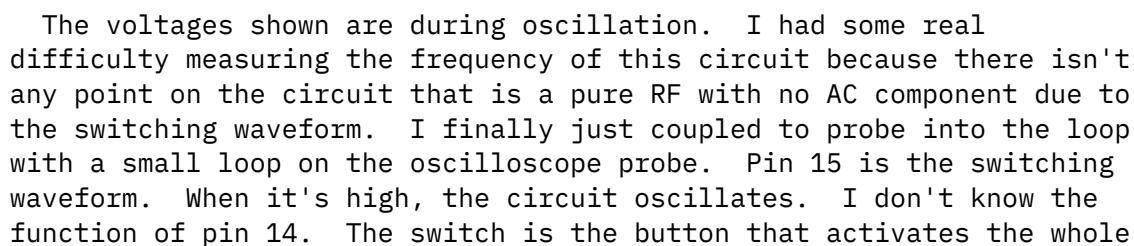
This clock has a period of approximately 1.15 milliseconds.

Coding:

The code for this unit is a 9 digit base 3 number. It is set via a 9 place dip switch with 3 positions per switch. The 3 positions are labeled minus zero and plus. The switch labeled 1 is sent first. Here are the waveforms associated with each "digit":

```
clock:  /_\/_\/_\/_\/_\/_\/_\/_\/_
-:      /_ \_ \_ \_ \_ \_ \_ \_ \_ \_ (ie. short short)
0:      /_ \_ \_ \_ \_ \_ \_ \_ \_ \_ (ie. long short)
+:      /_ \_ \_ \_ \_ \_ \_ \_ \_ \_ (ie. long long)
```

The IC reads the switch positions and produces a digital signal which is a sequence of nine of the above waveforms (one for each switch) strung end to end followed by a long period of zero output.



circuit.

Anyone with ideas for how to increase the power of this unit?

The receiver is in a weather sealed box and I haven't gotten brave enough to open it yet.

Brian McMinn N5PSS brian.mcminn@amd.com

Date: Sun, 14 Nov 1993 02:01:54 GMT
From: library.ucla.edu!europa.eng.gtefsd.com!emory!kd4nc!ke4zv!
gary@network.ucsd.edu
Subject: single sideband
To: ham-homebrew@ucsd.edu

In article <1993Nov13.164257.15906@cs.rit.edu> atd@cs.rit.edu (Albert T Davis) writes:

>
>I have been out of this for a while....
>
>Is the filter method still the most common for SSB generation?
>Why?
>
>It seems to me that the phasing method is far superior with today's technology.
>
>al.

It remains difficult to achieve a precise 90 degree phase shift over 3 octaves of audio frequencies. DSP offers the potential to solve that problem though.

Gary

--
Gary Coffman KE4ZV | Life's a journey, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | not a destination. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Live it. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: 10 Nov 1993 20:51:22 +0200
From: dog.ee.lbl.gov!agate!spool.mu.edu!olivea!inews.intel.com!ilx018-
bb.intel.com!ilx049.intel.com!not-for-mail@network.ucsd.edu
Subject: What's RG-22?
To: ham-homebrew@ucsd.edu

I was at this surplus electronic junk place, and they had a big spool of "RG-22" coax cable. I couldn't tell much about it, except that it seemed to resemble RG-8. None of my references (ARRL Handbook, Antenna Book, etc.) mention this type of cable. Anyone ever heard of it?

Thanx in advance,

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4X/N10WU Tel: 011-972-4-655069 dbraun@inside.intel.com

End of Ham-Homebrew Digest V93 #103

